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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/068,118 | 02/05/2002 | Hans Martin von Staudt | KOA 0205 PUS | 5758 |

7590 10/06/2003

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| EXAMINER | |
|---|---|
| RIOS CUEVAS, ROBERTO JOSE | |
| **ART UNIT** | **PAPER NUMBER** |
| 2836 | |

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

RF

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/068,118 | STAUDT ET AL. | |
| | Examiner | Art Unit | |
| | Roberto J Rios | 2836 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *05 March 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-19* is/are rejected.

7)☒ Claim(s) *5, 20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02/05/2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

### *Drawings*

1. The drawings are objected to because empty boxes should be labeled as to their proper function. For example, empty box (AO) in Figure 3 should be labeled "operation element". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6, 7 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Beigel et al (US patent 5,003,192).

As per claims 1 and 14, Beigel teaches an electric circuit being powered by a voltage supply and having two functional states, the electric circuit comprising: at least one control stage including a switching device, an electronic switching module, a single signal output and a single connecting line connecting the signal output to the electrical system (Figures 2, 3); the switching device including at least one manually operated push button switching element (25, 26) switchable between two switching states for generating respective switching state output signal at the signal output in order to switch the electrical system between the two functional states; the electronic switching module including a non-volatile flip-flop formed by EEPROM cells (30, 50) which are operable

for storing the switching state of the switching element, wherein the electronic switching module maintains the switching state output signal corresponding to the stored switching state at the signal output to maintain the functional state of the electrical system until the switching element is switched to the other switching state, and maintains the switching state output signal corresponding to the stored switching state at the signal output to maintain the functional state of the electrical system during an interruption of power from the voltage supply to the electrical system (col. 2, line 59+).

As per claims 2 and 3 Beigel teaches EEPROM section (50) comprising plural EPPROMS (Figure 3).

As per claim 4, Beigel teaches the electronic switching module further includes an evaluation stage operable for scanning respective states of the EEPROM cells of the flip-flop (col. 5, line 20+).

As per claim 6, Beigel teaches the at least one manually operated push-button switching element including two manually operated push-button witching elements switchable between two switchingstates for generating respective switching state output signals at the signal output in order to switch the electrical system between the at least two functional states (Figures 2, 3).

As per claim 7, Beigel teaches the electronic switching module including first and second inputs which are connected to the voltage supply, wherein the two switching elements are connected between respective inputs of the electronic switching module and the voltage supply such that operation of the first switching element causes the switching state output signal to be "0" at the signal output and operation of the second

switching element causes the switching state output signal to be "1" at the signal output (Figure 3).

As per claims 12 and 13, Beigel teaches the claimed diode and support capacitor (col. 4, line 22).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beigel in view of Herweck et al (US patent 5,731,763).

As per claims 8-10, Beigel teaches the claimed switching module but does not specifically disclose using LEDs to distinguish between on/off states of the switch. However. Herweck et al (herein after Herweck) teach a system, wherein a red and green LEDs are used to indicate operating status of a switch (col. 7, line 15).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Beigel's switching module with Herweck's LED indicating arrangement for the purpose of visually indicating a user the status of a switch.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beigel.

As per claim 11, Beigel teaches providing rectifying and voltage regulation circuit but does not specifically disclose providing an over-voltage limiting resistor. However,

the Examiner takes official notice that over-voltage limiting resistors are well known in the voltage protection art.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Beigel's switching module such that an over-voltage limiting resistor is included for the purpose of providing over-voltage protection means.

7. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beigel.

As per claim 15, Beigel teaches the claimed electric control circuit but does not specifically disclose implementing the circuit in a vehicle environment. However, to implement Beigel's electric control circuit in a vehicle environment would be a mere engineering design choice within the knowledge of one or ordinary skill in the art since for example Beigel's circuit is used for push-buttons switches that are well known in the vehicle environment.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Beigel's switching module as a matter of engineering design to provide a vehicle switch control with a latching memory capability.

As per claims 2 and 3 Beigel teaches EEPROM section (50) comprising plural EPPROMS (Figure 3).

As per claim 16, Beigel teaches the at least one manually operated push-button switching element including two manually operated push-button witching elements switchable between two switchingstates for generating respective switching state output

signals at the signal output in order to switch the electrical system between the at least two functional states (Figures 2, 3).

As per claims 17 and 18, Beigel teaches EEPROM section (50) comprising plural EPPROMS (Figure 3).

As per claim 19, Beigel teaches the electronic switching module further includes an evaluation stage operable for scanning respective states of the EEPROM cells of the flip-flop (col. 5, line 20+).

***Allowable Subject Matter***

8. Claims 5 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Art of general nature relating to latching memories has been cited for applicant's review.

**Communication with PTO**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rios whose telephone number is (703) 306-5518. In the event that Examiner Rios cannot be reached, his supervisor, Brian Sircus may be contacted at (703) 308-3119. The fax number for Before-Final communications and After-Final communications is (703) 872-9306.

Roberto J. Rios
Patent Examiner

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